

# SEQUENCE LISTING

<110> ICARD-LIEPKALNS, Christine  
 MAILLET, Jacques  
 RAVASSARD, Philippe

<120> POLYPEPTIDES OF THE "BASIC-HELIX-LOOP-HELIX" bHLH  
 FAMILY, CORRESPONDING NUCLEIC ACID SEQUENCES

<130> ST96042A-US

<140> US 9/331,356

<141> 1999-06-18

<150> FR96/15651

<151> 1996-12-19

<150> PCT/FR97/02368

<151> 1997-12-19

<160> 28

<170> PatentIn Ver. 2.1

<210> 1

<211> 1460

<212> DNA

<213> Rattus norvegicus

<400> 1

gcaggtagcg agaggagcag tccctggggcc cccgttgctg attggcccgt ggcacaggca  
 60

gcagcccggc aggcacgctc ctgggtccggg cagagcagat aaagcgtgcc aggggacaca  
 120

cgattagcag ctccagaagtc cctctgggtc tcaccactgc acagaggccg aggacccct  
 180

ccgagcttct ttgctgcctc cagacgcaat ttactccagg cgaggcgcc tgcagctcag  
 240

caaaacttcg aagcgagcag aggggttcag ctatccaccg ctgcttgact ctgaccaccc  
 300

gcagctctct gttcttttga gcccgagta actaggtaac atttaggaac ctccaaaggg  
 360

tagaagaggg gagtgggtgg gcgtactcta gtcccgcgtg gagtgacctc taagtcagag  
 420

actgtcacac ccccttcca ttttttcca acctcaggat ggcgccctcat cccttggtg  
 480

cgcccaccat ccaagtgtcc caagagaccc agcaaccctt tcccgagacc tcggaccacg  
 540

aagtgtcag ttccaattcc accccaccta gcccactct cgtaccgagg gactgtccg  
 600

aagcagaagc aggtgactgc cgaggagcat cgaggaagct ccgtgcgcgg cgcgaggagg  
 660

gcaacaggcc caagagcgag ttggcactga gcaagcagcg acgaagccgg cgcaagaagg  
 720

ccaacgaccg ggagcgcaac cgcattgaca accttaactc cgcgctggat gcgctgcgcg  
 780

SEQUENCE LISTING

Onb  
 A1



[illegible]

Ans  
Aul

```
<210> 5
<211> 18
<212> DNA
<213> Artificial Sequence
```

```
<400> 5
cgcggtgtcc tgcccacc
18
```

```
<210> 6
<211> 6
<212> DNA
<213> Artificial Sequence
```

```
<400> 6
caggtg
6
```

```
<210> 7
<211> 6
<212> DNA
<213> Artificial Sequence
```

```
<400> 7
tccgtg
6
```

```
<210> 8
<211> 214
<212> PRT
<213> Rattus norvegicus
```

<400> 8  
Met Ala Pro His Pro Leu Asp Ala Pro Thr Ile Gln Val Ser Gln Glu

1 5 10 15  
 Thr Gln Gln Pro Phe Pro Gly Ala Ser Asp His Glu Val Leu Ser Ser  
 20 25 30  
 Asn Ser Thr Pro Pro Ser Pro Thr Leu Val Pro Arg Asp Cys Ser Glu  
 35 40 45  
 Ala Glu Ala Gly Asp Cys Arg Gly Thr Ser Arg Lys Leu Arg Ala Arg  
 50 55 60  
 Arg Gly Gly Arg Asn Arg Pro Lys Ser Glu Leu Ala Leu Ser Lys Gln  
 65 70 75 80  
 Arg Arg Ser Arg Arg Lys Lys Ala Asn Asp Arg Glu Arg Asn Arg Met  
 85 90 95  
 His Asn Leu Asn Ser Ala Leu Asp Ala Leu Arg Gly Val Leu Pro Thr  
 100 105 110  
 Phe Pro Asp Asp Ala Lys Leu Thr Lys Ile Glu Thr Leu Arg Phe Ala  
 115 120 125  
 His Asn Tyr Ile Trp Ala Leu Thr Gln Thr Leu Arg Ile Ala Asp His  
 130 135 140  
 Ser Phe Tyr Gly Pro Glu Pro Pro Val Pro Cys Gly Glu Leu Gly Ser  
 145 150 155 160  
 Pro Gly Gly Gly Ser Ser Gly Asp Trp Gly Ser Ile Tyr Ser Pro Val  
 165 170 175  
 Ser Gln Ala Gly Ser Leu Ser Pro Thr Ala Ser Leu Glu Glu Phe Pro  
 180 185 190  
 Gly Leu Gln Val Pro Ser Ser Pro Ser Cys Leu Leu Pro Gly Thr Leu  
 195 200 205  
 Val Phe Ser Asp Phe Leu  
 210

<210> 9  
 <211> 1330  
 <212> DNA  
 <213> Homo sapiens

<400> 9  
 cctcggaccc cattctctct tcttttctcc tttggggctg gggcaactcc caggcggggg  
 60  
 cgctgcagc tcagctgaac ttggcgacca gaagcccgct gagctcccca cgccctcgc  
 120  
 tgctcatcgc tctctattct tttgcgccgg tagaaaggta atatttgag gccttcgagg  
 180  
 gacgggcagg ggaaagagg atcctctgac ccagcggggg ctgggaggat ggctgttttt  
 240

gttttttccc acctagcctc ggaatcgcg actgcgcccgt gacggactca aacttacccct  
 300  
 tccctctgac cccgccgtag gatgacgcct caaccctcgg gtgcgcccac tgtccaagtg  
 360  
 acccgtgaga cggagcggtc cttccccaga gcctcgggaag acgaagtgac ctgccccacg  
 420  
 tccgccccgc ccagccccac tcgcacaccg ggggaactgcg cagaggcgga agagggagggc  
 480  
 tgccgagggg ccccgaggaa gctccgggca cggcgcgggg gacgcagccg gcctaagagc  
 540  
 gagttggcac tgagcaagca gcgacggagt cggcgaaaga aggccaacga ccgcgagcgc  
 600  
 aatcgaatgc acgacctcaa ctcggcactg gacgccttgc gcggtgtcct gccaccttc  
 660  
 ccagacgacg cgaagctcac caagatcgag acgctgcgct tcgcccacaa ctacatctgg  
 720  
 gcgctgactc aaacgctgcg catagcggac cacagcttgt acgcgctgga gccgccggcg  
 780  
 ccgcactgcg gggagctggg cagcccaggc ggtccccccg gggactgggg gtccctctac  
 840  
 tccccagtct cccaggctgg cagcctgagt cccgccgcgt cgctggagga gcgacccggg  
 900  
 ctgctggggg ccacctcttc cgctgcttg agcccaggca gtctggcttt ctgagatttt  
 960  
 ctgtgaaagg acctgtctgt cgctgggctg tgggtgctaa gggtaagggg gagggagggg  
 1020  
 gccgggagcc gtagaggggtg gccgacggcg gcggccctca aaagcacttg ttccttctgc  
 1080  
 ttctccctag ctgacccctg gccggcccag gcctccacgg gggcggtagg ctgggttcat  
 1140  
 tccccggccc tccgagccgc gccaacgcac gcaacccttg ctgctgcccg cgcgaagtgg  
 1200  
 gcattgcaaa gtgcgctcat tttaggcctc ctctctgcca ccacccata atccattca  
 1260  
 aagaatacta gaatggtagc actaccggc cggagccgcc caccgtcttg ggtcgccta  
 1320  
 cctcactca  
 1330

<210> 10  
 <211> 214  
 <212> PRT  
 <213> Homo sapiens

<400> 10

Met Thr Pro Gln Pro Ser Gly Ala Pro Thr Val Gln Val Thr Arg Glu

1

5

10

15

Thr Glu Arg Ser Phe Pro Arg Ala Ser Glu Asp Glu Val Thr Cys Pro

20

25

30

Thr Ser Ala Pro Pro Ser Pro Thr Arg Thr Pro Gly Asn Cys Ala Glu

35

40

45

Ala Glu Glu Gly Gly Cys Arg Gly Ala Pro Arg Lys Leu Arg Ala Arg

50

55

60

Arg Gly Gly Arg Ser Arg Pro Lys Ser Glu Leu Ala Leu Ser Lys Gln  
65 70 75 80

Arg Arg Ser Arg Arg Lys Lys Ala Asn Asp Arg Glu Arg Asn Arg Met  
85 90 95

His Asp Leu Asn Ser Ala Leu Asp Ala Leu Arg Gly Val Leu Pro Thr  
100 105 110

Phe Pro Asp Asp Ala Lys Leu Thr Lys Ile Glu Thr Leu Arg Phe Ala  
115 120 125

His Asn Tyr Ile Trp Ala Leu Thr Gln Thr Leu Arg Ile Ala Asp His  
130 135 140

Ser Leu Tyr Ala Leu Glu Pro Pro Ala Pro His Cys Gly Glu Leu Gly  
145 150 155 160

Ser Pro Gly Gly Pro Pro Gly Asp Trp Gly Ser Leu Tyr Ser Pro Val  
165 170 175

Ser Gln Ala Gly Ser Leu Ser Pro Ala Ala Ser Leu Glu Glu Arg Pro  
180 185 190

Gly Leu Leu Gly Ala Thr Ser Ser Ala Cys Leu Ser Pro Gly Ser Leu  
195 200 205

Ala Phe Ser Asp Phe Leu  
210

<210> 11  
<211> 18  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: PCR Primer

<400> 11  
caacgaccgg cagcgcaa  
18

<210> 12  
<211> 24  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: PCR Primer

<400> 12  
gccagatgt agttgtgggc gaag  
24

[illegible]

*[Handwritten signature]*

```
<210> 17
<211> 25
<212> DNA
<213> Artificial Sequence
```

<223> Description of Artificial Sequence: PCR Primer

```
<400> 17/  
tcgtaccagc agagtcacga gagag  
25
```

<210> 18  
<211> 19  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: PCR Primer

```
<400> 18
ctgccagcct gggagactg
19
```

```
<210> 19
<211> 50
<212> DNA
<213> Artificial Sequence
```

<220>  
<223> Description of Artificial Sequence: PCR Primer

```
<400> 19
ctgcatctat ctaatgctcc tctcgctacc tgctcactct gcgtgacatc
50
```

```
<210> 20
<211> 25
<212> DNA
<213> Artificial Sequence
```

<220>  
<223> Description of Artificial Sequence: PCR Primer

```
<400> 20
gatgtcacgc agagtgagca ggtag
25
```

```
<210> 21
<211> 23
<212> DNA
<213> Artificial Sequence
```

<223> Description of Artificial Sequence: PCR Primer

<400> 21



agcctgggag actggggagt aga  
23

<210> 22  
<211> 24  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: PCR Primer

<400> 22  
agagtggagca ggtagcgaga ggag  
24

<210> 23  
<211> 22  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: PCR Primer

<400> 23  
cgctatgcgc agcgtttgag tc  
22

<210> 24  
<211> 25  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: PCR Primer

<400> 24  
cctcggaccc cattctctct tcttt  
25

<210> 25  
<211> 24  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: PCR Primer

<400> 25  
tgagtggagg tagggcgacc caag  
24

<210> 26

<211> 15  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Probe

<400> 26  
aggaagctcc gggca  
15

<210> 27  
<211> 1381  
<212> RNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Probe

<400> 27  
gggcgaauug ggcccagcgu cgcaugcucc cggccgccau ggccgcggga uuugagugag  
60  
gguaagggcga cccaagacgg ugggcggcuc cggccgggua gugcuaccu ucuagauuc  
120  
uuugaauuggg auuauggggu gguggcagag aggaggccua aaugagcgc acuuugcaau  
180  
gcccacuucg cgcgggcagc agcaaggguu gcgugcguug gcgcggcucg gagggccggg  
240  
gaaugaaccc agccuaccgc ccccguggag gccugggccg gccagggguc agcuagggag  
300  
aagcagaagg aacaagugcu uuugagggcc gccgccgucg gccaccucuc acggcucccg  
360  
gcuccucucc ucuccuuac ccuuagcacc cacagcccag cgacagacag guccuuucac  
420  
agaaaaucug agaaagccag acugccuggg cucaagcagg cggaagaggu ggccccagc  
480  
agcccggguc gcuccuccag cgacgcggcg ggacucaggc ugccagccug ggagacuggg  
540  
gaguagaggg acccccaguc cccgggggga ccgccugggc ugcccagcuc cccgcagugc  
600  
ggcgcggcg gcuccagcgc guacaagcug ugguccgcu ugcgcagcgu uugagucagc  
660  
gccagaugu aguugugggc gaagcgcagc gucucgauc uggugagcu cgcgucgucu  
720  
gggaaggugg gcaggacacc gcgcaggcg uccagugccg aguugagguc gugcauucga  
780  
uugcgucgc ggucguuggc cuucuuucgc cgacuccguc gcugcuugcu cagugccaac  
840  
ucgcucuag gccggcugcg uccccgcgc cgugcccga gcuuccucgg ggccccucgg  
900  
cagccuccu cuuccgccuc ugcgaguc cccggugugc gaguggggcu gggcggggcg  
960  
gacguggggc aggucacuuc gucuuccgag gcucugggga aggaccguc cgucucacgg  
1020  
ucacuuggac agugggcgca cccgaggguu gaggcgucau ccuacggcgg ggucagaggg  
1080

U09604650

amb  
H1

```
<210> 28
<211> 1427
<212> RNA
<213> Artificial Sequence
```

<400> 28					
agcuaugcau	ccaacgcguu	gggagcucuc	ccauaugguc	gaccugcagg	cggccgcgaa
60					
uucacuagug	auuccucgga	ccccauucuc	ucuucuuuuc	uccuuugggg	cugggggcaac
120					
ucccaggcg	gggcgcugc	agcucagcug	aacuuggcga	ccagaagccc	gcugagcucc
180					
ccacggcccu	cgcugcucau	cgcucucua	ucuuuugcgc	cgguaagaa	guaauuuug
240					
gaggccuucg	agggacgggc	aggggaaaga	gggauccucu	gaccagcgg	gggcugggag
300					
gauggcuguu	uuuguuuuuu	cccaccuagc	cucggaucg	cggacugcgc	cgugacggac
360					
ucaaacuuac	ccuucccucu	gaccccgccg	uaggauagc	ccucaaccuu	cgggugcgcc
420					
cacuguccaa	gugacccgug	agacggagcg	guccuucccc	agagccucgg	aagacgaagu
480					
gaccugcccc	acguccgccc	cgcccagccc	cacucgcaca	ccggggaacu	gcgcagaggc
540					
ggaagaggga	ggcugccgag	gggccccgag	gaagcuccgg	gcacggcgcg	ggggacgcag
600					
ccggccuaag	agcgaguugg	cacugagcaa	gcagcgacgg	agucggcgaa	agaaggccaa
660					
cgaccgcgag	cgcaaucgaa	ugcacgaccu	caacucggca	cuggacgccc	ugcgcgguuu
720					
ccugcccacc	uucccagacg	acgcgaagcu	caccaagauc	gagacgcugc	gcuucgcccc
780					
caacuacauc	ugggcgcuga	cucaaagcgu	gcgcuaagcg	gaccacagcu	uguacgcgcu
840					
ggagccgccc	gcgccgcacu	gcggggagcu	gggcagcccc	ggcggucccc	ccggggacug
900					
ggggucccuc	uacuccccag	ucucccaggc	uggcagccug	agucccgccc	cgucgcugga
960					
ggagcgaccc	gggcugcugg	gggccaccuc	uuccgccugc	uugagcccag	gcagucuggc
1020					

Ans  
11  
m

[illegible]